

Summary of the NASA Science Instrument, Observatories and Sensor Systems (SIOSS) technology assessment roadmap

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In August 2010, the NASA Office of Chief Technologist (OCT) commissioned an assessment of 15 different technology areas of importance to the future of NASA. Technology Assessment #8 (TA8) was Science Instruments, Observatories and Sensor Systems (SIOSS). SIOSS assessed the needs for optical technology ranging from detectors to lasers, x-ray mirrors to microwave antenna, in-situ spectrographs for on-surface planetary sample characterization to large space telescopes. This needs assessment looked across the entirety of NASA and not just the Science Mission Directorate. This paper summarizes the SIOSS findings and recommendations.